

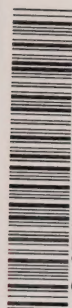
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Public safety agencies and seniors
A description of ambulance,
fire protection and police services

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**PUBLIC SAFETY AGENCIES
AND SENIORS:
A DESCRIPTION OF
AMBULANCE, FIRE PROTECTION AND POLICE SERVICES**

by

**J. Kiedrowski
and
C.H.S. Jayewardene**

**March 1994
National Advisory Council on Aging**

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The *Writings in Gerontology* present indepth examinations of topical issues in the field of aging. The opinions expressed are those of the authors and do not necessarily imply endorsement by NACA.

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WHAT IS THE NATIONAL ADVISORY COUNCIL ON AGING?

The National Advisory Council on Aging (NACA) was created by Order-in-Council on May 1, 1980 to assist and advise the Minister of Health on issues related to the aging of the Canadian population and the quality of life of seniors. NACA reviews the needs and problems of seniors and recommends remedial action, liaises with other groups interested in aging, encourages public discussion and publishes and disseminates information on aging.

The Council has a maximum of 18 members from all parts of Canada. Members are appointed by Order-in-Council for two- or three-year terms and are selected for their expertise and interest in aging. They bring to Council a variety of experiences, concerns and aptitudes.

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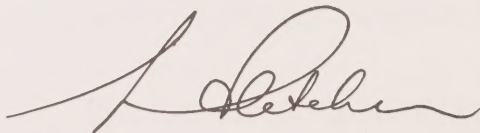
FOREWORD

The *Writings in Gerontology* Series is intended as a vehicle for sharing ideas on topical issues related to the quality of life of seniors and the implications of an aging population. It is produced as part of the National Advisory Council on Aging's mandate to publish and disseminate information and to stimulate public discussion about aging.

The Council endeavours to ensure that the articles in the series provide useful and reliable information. Most of the texts are original manuscripts. Some are written by Council staff, others by experts in their fields.

This series is addressed to seniors and the people who care about their well-being. It is hoped that readers will find the *Writings* useful.

The Council welcomes comments on the topics selected, as well as on the contents of the articles.

A handwritten signature in black ink, appearing to read 'S. Fletcher', with a long horizontal flourish extending to the left.

Susan Fletcher

Executive Director

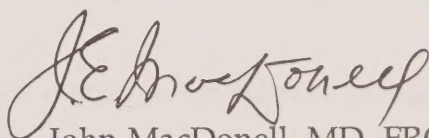
National Advisory Council on Aging

PREFACE

In 1989, the National Advisory Council on Aging (NACA) published a report on barriers to seniors' independence. One of the barriers identified was the safety and security of seniors living in their own homes or with family members. An important aspect of this concern about safety and security is the response to seniors of emergency services such as fire, police and ambulance. This study reviews current public safety programs directed specifically to seniors that have been developed by ambulance, police and fire protection services. Information was gathered from existing studies, and a questionnaire was sent to officials responsible for each public safety sector.

There is a paucity of Canadian research on the public safety response to seniors. Responses to the questionnaire showed that it is the police that are most aware of the concerns and needs of seniors and have developed the most programs to address perceived needs. Some programs, however, have been developed without adequate consultation with seniors about their needs and how to address them. By contrast, relatively few programs directed to seniors, particularly those living independently in the community, have been developed by fire protection and ambulance services — despite the realities of an aging population and the fact that advancing age is associated with both greater demand for ambulance services and higher risk of injury or death in a fire.

The Council wishes to thank Mr. J. Kiedrowski and Dr. C.H.S. Jayewardene for preparing this *Writing in Gerontology*, as well as the Council's staff, who brought the research report to publication stage.



John MacDonell, MD, FRCP(C)
Chairperson

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INTRODUCTION

In 1989, the National Advisory Council on Aging (NACA) undertook a study aimed at better understanding the barriers to independent living encountered by seniors in the community and the consequences of these barriers (NACA, 1989). The study identified many barriers that interfere with seniors' quality of life, among them a major concern about safety and security.

This concern stems from a perception that seniors cannot protect themselves, making them easy targets for criminals, and that their isolation may render them helpless in an accident, fire or medical emergency. Many seniors are anxious and apprehensive about living alone or going out unaccompanied. Others wonder what would happen if they needed help in an emergency. Anxiety sometimes takes the form of vague feelings of uneasiness, but sometimes it seriously impairs seniors' ability to remain independent. Contributing to the problem is seniors' lack of knowledge about available safety measures (NACA, 1989).

Fostering a greater sense of safety and security would therefore make an important contribution to seniors' quality of life. As Canadian society ages, decision makers — including those responsible for fire, police and ambulance services — are recognizing that public policies and programs must respond to the changing characteristics of the population (Leighton and Normandeau, 1990). They acknowledge that the nature of public safety work must change to accommodate seniors' needs and concerns and take into account factors that can make seniors susceptible to criminal victimization or vulnerable in fire and medical emergencies. As this study will show, however, the development of new approaches to meet these needs is uneven at best, varying greatly from province to province and from one type of public safety service to another.

The purpose of this study is to provide an overview of current public safety programs directed to seniors by police, fire protection and ambulance services. It also identifies and reviews current public safety activities and practices that affect seniors, even if not directed specifically to them. The study examines how these activities and practices help to support and enhance the independence and quality of life of seniors and identifies strategies that public safety agencies can use to

develop them. This report is designed to show the kinds of programs that can be organized by presenting examples of current programs.

1. METHODOLOGY

The study began with a comprehensive review of the literature. A questionnaire about programs, policies and procedures was also developed and sent to senior officials in provincial government departments and agencies responsible for public safety (Appendix A). Questionnaires were mailed to 54 agencies. Eleven of these dealt with ambulance services, thirteen with fire services and fifteen with the police services. A further fifteen were sent to seniors' groups (A list of agencies and groups contacted is available from NACA upon request). The overall response rate was 59 per cent (73 per cent for ambulance services, 87 per cent for police services, 31 per cent for fire services, and 47 per cent for seniors' organizations).

Not included in the study are home safety programs designed to reduce the risk of injury in seniors' homes (such as those of the Canada Safety Council) or programs serving seniors in institutions. The study concentrated on programs and policies directed to seniors living independently in the community.

2. AMBULANCE SERVICES AND SENIORS

As people age, they generally become more frequent users of health care services and hence will likely come to rely more heavily on ambulance services. Although disease and disability are not the exclusive domain of seniors, cardiac and circulatory malfunction, which is more prevalent among seniors than the rest of the population, gives rise to more frequent use of ambulances for medical emergencies. In addition, seniors with diseases that impair mobility, such as arthritis, may require non-emergency ambulance services, such as transportation between home and an out-patient program.

Emergency ambulance services usually involve two main objectives: transporting patients to hospital with a minimum of delay, and ensuring that patients are transported with minimum deterioration in their condition. When ambulances are used for non-emergency medical transportation, the safety and comfort of passengers are the main concern. Planning efficient and effective services therefore requires information about patterns and purposes of ambulance use in a given population so as to ensure the right number of vehicles stocked with the right mix of equipment and trained personnel to provide services in both emergency and non-emergency situations.

This study showed that, for the most part, planning of ambulance services in Canada has yet to reflect the changing age composition of the population or the implications of these changes for how services are provided. Instead, ambulance services are facing rising demands for emergency services as the population ages while also trying to meet a growing demand for non-emergency transportation occasioned by the increasing proportion of seniors in the population. They are doing so without adequate information about patterns of use or the needs of the seniors they are trying to serve.

Information on the number of seniors using ambulance services in Canada is scant.¹ Only the British Columbia Ambulance Service has collected data on rates of ambulance use by age group. These data confirm that as people age, the likelihood that they will require ambulance services increases (British Columbia Ambulance Service, 1993; see Table 1). Table 1 shows that the call rate is much greater for the age groups over 50 than for those age 49 and under, and the over-80 age category is the major user of ambulance services. These figures suggest that the aging of the population will place an increasing demand on ambulance services, especially with an increasing rate of growth of the older age groups (Health and Welfare Canada, 1982). U.S. studies also show a positive correlation between age and the demand for emergency medical services (Aldrich et al., 1971; Schuman et al., 1977; Williams and Shavlik, 1979; Kvalseth and Deems, 1979; Gerson and Skvarch, 1982; Cardigan and Burgarin, 1989).

2.1 Emergency Services

To plan effective services, knowing the type of calls is as important as the number of calls. U.S. studies show that most emergency ambulance use among seniors results from motor vehicle accidents (McCoy et al., 1989), respiratory or heart problems, and falls, with use for auto accidents declining with age (Spaite et al., 1990). Overall, however, relatively little is known about injury and trauma patterns among seniors (Spaite et al., 1990). Yet understanding injury and illness patterns is vital if ambulance services and emergency physicians are to respond to seniors' medical needs.

Having more detailed information about the nature and frequency of various types of injuries in a population enables planners to design the optimal mix of vehicles, equipment and trained personnel. For example, falls are a significant cause of injury among seniors requiring emergency medical attention. These falls may cause face, head, hip and extremity injuries, but rarely neurological injuries resulting in unconsciousness (Spaite et al., 1990). Similarly, if seniors have existing medical conditions or are generally in less robust physical health, pre-hospital intervention by ambulance attendants may make the difference between life and death on route to hospital. These different needs may call for different types of treatment, using different types of equipment, and hence for specialized skills on the part of ambulance personnel transporting seniors.

The level of education and skills in providing pre-hospital intervention required for ambulance personnel varies from service to service. For example, the high level of training and skills demanded of its personnel has earned the British Columbia Ambulance Service a reputation as one of the world's most efficient and effective pre-hospital care systems, and its training program is being used as a model for other emergency medical services (Garrow, 1993). As part of their comprehensive training program, B.C. paramedics take courses sensitizing them to the needs of seniors under their care. This level of preparedness to provide pre-hospital intervention is not uniform across the country, however.

**Table 1: Regional Comparison of Ambulance Use
per 1,000 Population by Sex and Age Group**

| Sex | Region | Rate per 1,000 | | | | | | | | |
|--------|--------------------------|----------------|-------|--------|-------|-------|-------|--------|--------|--------|
| | | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| Female | Region 1 — Victoria | 62.41 | 56.49 | 73.18 | 53.07 | 41.00 | 60.26 | 95.73 | 204.18 | 500.84 |
| | Region 2 — Vancouver | 116.98 | 57.69 | 74.25 | 64.27 | 57.70 | 74.04 | 123.04 | 263.49 | 603.16 |
| | Region 3 — Kamloops | 62.11 | 44.21 | 58.89 | 43.54 | 39.91 | 45.79 | 85.38 | 171.01 | 438.78 |
| | Region 4 — Cranbrook | 41.35 | 33.53 | 64.48 | 37.80 | 34.79 | 58.32 | 94.24 | 247.79 | 461.65 |
| | Region 5 — Prince George | 59.11 | 57.59 | 68.91 | 45.02 | 44.90 | 45.39 | 132.06 | 185.32 | 553.93 |
| | Region 6 — Terrace | 36.76 | 44.79 | 53.36 | 46.74 | 35.95 | 59.18 | 104.88 | 333.45 | 679.64 |
| | Region 7 — Terrace | 50.26 | 59.67 | 89.44 | 55.14 | 37.22 | 88.57 | 160.66 | 325.85 | 783.34 |
| | Region 8 — Prince George | 30.33 | 39.84 | 61.54 | 39.36 | 34.23 | 51.03 | 118.47 | 168.27 | 564.19 |
| Male | Region 1 — Victoria | 68.01 | 65.10 | 87.28 | 69.23 | 65.22 | 76.24 | 131.00 | 243.37 | 526.73 |
| | Region 2 — Vancouver | 158.32 | 57.22 | 91.68 | 86.09 | 84.08 | 96.26 | 165.65 | 321.45 | 647.95 |
| | Region 3 — Kamloops | 78.88 | 49.98 | 86.12 | 63.75 | 50.97 | 73.79 | 127.09 | 241.35 | 440.42 |
| | Region 4 — Cranbrook | 46.75 | 39.71 | 52.49 | 43.56 | 43.23 | 63.44 | 113.52 | 230.47 | 367.32 |
| | Region 5 — Prince George | 68.34 | 47.17 | 92.08 | 72.81 | 61.48 | 67.16 | 119.43 | 265.32 | 624.88 |
| | Region 6 — Terrace | 30.98 | 51.18 | 72.78 | 73.98 | 74.98 | 60.20 | 146.59 | 328.37 | 698.49 |
| | Region 7 — Terrace | 66.33 | 64.41 | 118.14 | 60.12 | 71.40 | 75.32 | 173.86 | 196.44 | 544.99 |
| | Region 8 — Prince George | 31.69 | 34.21 | 54.29 | 61.91 | 49.86 | 71.98 | 106.90 | 154.48 | 491.47 |

Note: Table uses 1993-1994 estimated patients per year and 1993 population based on adjusted age/sex date; excludes administrative use.

Source: British Columbia Ministry of Health, B.C. Ambulance Services.

2.2 Non-Emergency Services

In addition to providing emergency response, ambulance services are also being called on increasingly to provide non-emergency transportation for seniors for a variety of reasons. Except perhaps in British Columbia, the central problem is meeting the rising demand for medical services while also responding to new calls for non-emergency transportation. In British Columbia, the clash between maintaining existing emergency services while also making provision for non-emergency medical transportation has been resolved by providing ambulatory patient vans for non-emergency transportation. These vans have regular seating and can also accommodate wheel chairs and stretchers.

In Ontario, the question of non-emergency transportation is being reviewed by the ministries of transportation and health. The government established the Community Transportation Review in 1991 to examine the non-emergency medical transportation needs of seniors. The Emergency Medical Services Review,² however, had already suggested creating a two-tier system, one for non-emergency transportation and the other for emergency medical services (Swimmer, 1991).

Many of the studies reviewed clearly showed a trend toward greater use of ambulance services for non-emergency situations. The result for ambulance services may be more calls to transport frail older patients who are not in life-threatening situations. Thus, a future objective of ambulance services could be to ensure that patients are safe and comfortable during transportation but not necessarily to respond to medical needs.

This has obvious implications for the training of ambulance personnel. As Richard Zuschlag of Acadian Ambulance, an emergency medical service located in Louisiana, points out, this calls "for the addition of a new orientation in the training of paramedics. It calls for the addition of caring to the treating and curing the paramedics generally learn" (Hamm, 1993). The need for the additional training is stressed by Diana Herbert, a paramedic working for Acadian: "I was moving a patient, and she suddenly screamed. Her skin had torn. She began

crying. I cried too. I had no idea how tender and fragile these people are" (Hamm, 1993).

Acadian Ambulance, together with Air Med Services and SSA Consultants Inc., a human relations consulting firm, has developed "Carpe Diem: Seize the Day", a program designed to sensitize ambulance personnel to the needs of seniors and to ensure patients' comfort en route to hospital. The program's training component tries to give trainees a sense of what it is to be a senior, using techniques such as lectures, problem-based cases, group discussions and audio-visual presentations. It also uses role playing, in which people wearing ear plugs to impair their hearing, special glasses to restrict their vision, splints on their arms and legs, and gloves or bandages on their hands to simulate the crippling effects of arthritis, attempt to perform simple tasks. Having depicted the possible physical and mental state of their clients, trainees are instructed in the precautions to be taken when transporting seniors.

It is essential, for example, to ensure that limbs, especially paralysed ones, are well protected, that a sufficient amount of padding is placed between the patient and the parts of the ambulance with which the patient comes in contact, that stretcher straps and pull covers are left a little loose, and that patients are dressed adequately for the weather. Before transporting seniors, ambulance personnel should know where the patient is going and why, be familiar with the patient's medical history, and check the patient before leaving for such problems as inflamed I.V. sites. Attendants are told to remain with the patient in the examination room, unless instructed to step out, to give the patient reassurance, to communicate with the doctor if the patient is unable to speak or is not aware of where he or she is, and to learn whether prescriptions need to be filled.

No such training programs appear to exist in Canada. The British Columbia Ambulance Service is, however, considering introduction of this program as part of its training curriculum.

In summary, the literature reviewed and the data collected in British Columbia show that the use of ambulance services — for emergencies and non-emergencies alike — will rise as the population ages. The survey showed, however, that for the most part Canadian ambulance services have yet to respond to the aging of the population by training their personnel or designing programs intended specifically to meet the needs of seniors under their care in emergency or non-emergency situations. Nor have decision makers come to grips as yet with the best means of responding to the rising demand for emergency and non-emergency medical transportation and the conflict inherent in trying to meet both types of needs using existing ambulance services.

3. FIRE PROTECTION SERVICES AND SENIORS

Despite a high rate of fire deaths and injuries among seniors, few fire protection services in Canada have fire education programs directed specifically to seniors living independently and designed in consultation with them. With more specific information about the causes of fires and the nature of fire injuries among seniors living independently, fire protection services could design more effective programs to prevent fires and minimize damage and injuries caused by fires in seniors' homes.

Canadian seniors are involved in a disproportionate number of deaths from fire. In Ontario, 37 per cent of people who die in fires are 60 years of age or older. The death rate for the 60+ age group is 39.12 per million, almost twice the rate of 20.43 per million for the 50-59 years category (Ontario, Office of the Fire Marshal, 1990).

3.1 Risk Factors

Studies of fire deaths among seniors in the United States show that those at highest risk are seniors living independently or with families in residential settings rather than in health care or institutional facilities (Walker et al., 1992). A

significant percentage of these deaths occurs during the daytime, suggesting that seniors run an especially high risk from fire when left alone (Hall, 1990).

Another risk factor is poverty (Fahy and Norton, 1989). Seniors living in poverty may be living in substandard housing, be less likely to have or maintain smoke detectors, and more likely to have unsafe heating equipment and electrical systems. The same conditions may exist, of course, among higher-income seniors if they live in older homes without the safety features of modern construction, including adequate and accessible supplementary exits, fire-proof insulation, smoke detectors and fire extinguishers (NACA, 1989). To address the issue of poverty, the Office of the Ontario Fire Marshall, in partnership with other organizations, distributes smoke alarms free of charge to people who would otherwise not be able to afford them.

Aging itself can also be a risk in fire injuries and death if changes in sensory and physical functions make it difficult to detect or escape a fire. An impaired sense of smell, for example, could prevent recognition of warning signals such as smoke or a gas leak. One study found, for example, that people over 60 were less likely to be able to detect the odour of ethyl mercaptan, the most commonly used warning agent in propane tanks (Stevens et al., 1978). Older adults will also be vulnerable if they are bedridden or have a physical disability that prevents them from escaping a fire (Hall, 1990; Miller, 1993). Even in the absence of these conditions, seniors may be unable to react or move quickly enough to escape (Miller, 1993), and medication may compound the problem (Petraglia, 1991).

A third factor, revealed by studies of fire deaths among seniors, is that in many cases victims are found close to the source of the fire, suggesting that they might have contributed to starting it (Hall, 1990). The leading causes of fires in seniors' own homes are similar to those for the general population: for fires causing death, the top three sources are smoking (34 per cent), heating units (19 per cent), and electrical distribution systems (11 per cent). For fires with injuries to seniors, the leading causes are cooking (24 per cent), smoking (22 per cent), and heating units (13 per cent) (Walker et al., 1992).

One study suggests that fires in seniors' houses are more likely to be caused by mattresses, bedding, and other combustible materials being placed too close to heating units or open fires, than by defective heating units. Again, the circulatory changes that accompany aging, making older people more vulnerable to cold, could be a factor in such cases. Cooking fires, the study suggests, tend to happen when loose clothing gets in the way and catches fire. Contributing to injuries and death are attempts to extinguish the fire without calling for help (Miller, 1993).

3.2 Types of Programs

Taking the risk factors into consideration, programs to protect seniors from fire can take two forms — fire prevention programs and programs to minimize fire damage and injuries. The two are often complementary components of a broader fire protection program. We found three broad types of programs designed to protect seniors living independently:³

1. Educational programs addressed to seniors in general are designed to impart information about preventing fire. Most rely on self-education through pamphlets outlining the common hazards and precautionary measures. Most such pamphlets are prepared for general use; to be useful for seniors, pamphlets should be printed in large type.

Some programs in this category go beyond pamphlets to include lectures and films, usually offered through seniors' centres. One such program, run by the Office of the Ontario Fire Marshall, is called "Fire Safety for Older Adults." Its objective is to educate seniors about fire safety and how to reduce the risk of fire.

2. Programs in the second category involve education of caregivers and fire fighters and usually entail pamphlets and videos on fire prevention and what should be done in case of fire. These programs emphasize the need for sound evacuation plans and regular fire drills. Also in this category are programs to encourage seniors to register with the local fire protection service, enabling fire fighters to find and evacuate them safely in the event of

fire. One such program, organized by the Ottawa fire department, has received considerable support from seniors (Juliani et al., 1983).

3. A third category includes programs intended specifically for seniors living independently. Based on our survey, there are few Canadian programs in this category. The one program identified is a fire inspection program offered by the Office of the Ontario Fire Marshall. In the United States, programs intended to reach seniors in their homes are televised on local cable channels. In addition, some fire departments, including the one in Providence, Rhode Island, supplements educational programs by offering to install and inspect smoke detectors in the homes of people over the age of 60 (Petraglia, 1991).

Another program in this category is the Adaptable Firesafe Demonstration House, a U.S. project involving the National Association of Home Builders, the Fire Administration and the Architectural and Transportation Barriers Compliance Board. The program provides housing designs that incorporate fire safety features tailored to older adults and people with disabilities, such as a pull-out ironing board at wheelchair height with an iron that shuts off automatically (Petraglia, 1991).

3.3 Conditions for Effectiveness

To be effective in reducing death and injury, fire safety education programs should meet three conditions (Walker et al., 1992): comprehensiveness, a strategy for reaching seniors in the setting where they live (as opposed to providing courses at seniors' centres), and a means of educating not only seniors but also family members and others responsible for seniors' safety. Walker and colleagues tested these assertions by developing a fire safety education curriculum with the assistance of experts in fire safety, gerontology, health care, developmental disabilities, research and instructional design, as well as input from older adults.⁴

The curriculum was tested in workshops with three target groups — operators and staff of health care facilities, operators and staff of boarding and care homes, and seniors living independently in the community. Evaluation of the workshops showed significant gains in knowledge in all groups. Whether these gains contributed to actual reductions in fires, fire injuries and fire deaths remains a matter of speculation, but studies in other disciplines show that although educational programs do increase levels of knowledge, they are not usually as successful in changing attitudes and behaviour (Jayewardene et al., 1977).

Assuring seniors' safety and security by minimizing the impact of fire demands a two-pronged approach: first, preventing fire where possible and, second, minimizing injuries and damage when fire does occur. At present, most programs appear to be directed to fire prevention through, for example, adoption of better construction standards, better supervision of heat sources, and encouraging seniors to exercise greater care when smoking and cooking.

Relatively fewer programs have been directed to minimizing fire damage. Evacuation plans, fire drills and fire department registration programs are an important part of this effort, but programs are also needed that take account of seniors' particular needs in fire emergencies. For example, early detection and evacuation are essential in minimizing risks, yet seniors may be vulnerable because of the physiological changes of aging discussed earlier. If sensory losses have occurred, for example, or if seniors are taking medication to promote sleep, normal fire alarms may not alert them. The use of high-pitched electric horns, strobe lights and devices to shake the bed could help overcome these problems.

In summary, the risk of fire injury and death among senior citizens is high. Those at highest risk are seniors living in family settings or independently. Most existing fire education programs are intended for general use, however, and few are appropriately designed to reach seniors living independently in the community. Many of the fire-related deaths and injuries among seniors are preventable, so programs need to be directed not only to preventing fire but also to giving seniors

sufficient warning to enable them to escape and teaching them how to react in a fire emergency — for example, not trying to extinguish a fire themselves.

4. POLICE SERVICES AND SENIORS

Significant among the factors that can undermine seniors' quality of life is the perception that they are vulnerable to criminal victimization; the resulting loss of a sense of safety and security may contribute to social isolation by causing them to limit outings and other activities. Recognizing concerns about victimization among seniors, police departments have developed or supported numerous programs intended to reduce victimization and deal with its effects. Little is known about the effectiveness of these programs, however; ironically, far from enhancing feelings of safety and security, some programs may actually heighten seniors' fears or contribute to social isolation. Moreover, much of the early attention to crime prevention was based on the mistaken assumption that seniors experience higher rates of victimization than the general population. Despite more recent studies debunking this view, programs still tend to be based on a prevention approach. In this section we review the efforts of police forces to provide services that are more sensitive to the concerns of older citizens and discuss their effectiveness in responding to seniors' needs.⁵

The conventional wisdom is that the circumstances of seniors — deteriorating health, increasing frailty, limited financial resources and circumscribed social contacts — not only make their criminal victimization more likely but also render the effects of victimization more devastating. In Canada these concerns reached public attention in the late 1970s and early 1980s in the form of statistical studies, reports such as *Elderly Victimization—A Survey Report*, by the Royal Canadian Mounted Police (Jones, 1981), and the 1989 crime prevention initiative by the Solicitor General of Canada and the RCMP (Kinnon and MacLeod, 1990).

4.1 Types of Programs

This public attention resulted in the development of programs in communities across Canada. They fall into four broad categories:

1. Educational programs to give seniors information on crime and the criminal justice system through lectures, film presentations, pamphlets, brochures and bulletins (Kean, 1993; Jones, 1987). Programs are intended to help seniors identify and avoid situations of potential victimization or to acquaint them with the criminal justice system so as to reduce apprehension about dealing with the police and courts. Some programs in this category are directed to police officers to increase their awareness of seniors' concerns and needs.
2. Programs intended to minimize the sense of isolation felt by seniors and improve relations between seniors and the police. Included are community policing initiatives such as daily contact programs and crime prevention programs (neighbourhood watch, etc.). In some jurisdictions seniors have also been recruited as volunteers for administrative duties or to serve as probation officers for youthful probationers.
3. Crime prevention programs based on home security checks, marking of possessions with identification numbers, instruction on what to do if an intruder is discovered in the house, and escort/companion programs to prevent purse snatching, mugging and similar crimes.
4. Victim assistance programs to provide support if a crime does occur. Some such programs are designed with seniors in mind. For example, victims might not be required to come to the police station; instead, investigating officers visit them. To avoid long waits to testify in court, victims are alerted by telephone when their presence is required. Investigating officers may pay follow-up visits to inform seniors of progress on the case. Some programs include support systems intended to improve seniors' confidence in the justice system (Jayewardene et al., 1983).

Programs in the last category originated in the general move to provide better service to crime victims. For example, shortly after the victim services unit of the Edmonton Police Department was established in 1979, it was realized that seniors appeared to require more attention and counselling than other victims. The program was therefore expanded to enable the police to seek out elderly victims and provide assistance, for example, in replacing personal papers, repairing property damage, and making funeral arrangements if needed. In addition, victims are referred to agencies or community groups providing specialized services (Edmonton Police Department, 1980; Muir, 1985).

The Calgary City Policy Service Liaison Program, established in 1978 as part of the victim assistance unit, also realized that seniors had particular needs and appointed a seniors liaison officer and began to train police officers to deal more sensitively with seniors. Seniors, it was found, were less likely to call for assistance and therefore had to be sought out. Usually the assistance they needed was "more a product of the offence to which they were subjected than to any unique post-victimization needs" (Muir, 1984). The liaison officer also works with a committee of seniors to organize and conduct preventive educational programs "geared to their needs of home security, frauds and cons, elder abuse and suicide."

Summarizing the situation at the end of the 1980s, Kinnon and MacLeod (1990) observed that many police forces across Canada had taken steps to provide more sensitive services for people 65 years of age and over; they maintained, however, that "in the majority of police forces, policing for seniors has not emerged as a consistently strong priority outside the crime prevention divisions." Responses to the questionnaire sent out for this study indicate that most police programs consist of the distribution of pamphlets or booklets on crime prevention. Existing services reflect not a concerted effort to institute programs that deal with the needs and concerns of seniors but the ad hoc efforts of various police forces in different communities.

4.2 Effectiveness of Programs

Despite claims that programs have been successful in reducing the victimization of seniors, in fact there is little published evidence of their effectiveness and apparently little evaluation on which to base such claims. Even if programs have been successful, some commentators are warning that this may have been achieved at great and unwarranted expense — deterioration of the quality of life of seniors.

Among the programs singled out for criticism have been those that seek to prevent offender/victim contact; for example, the indiscriminate use of home security devices could make seniors virtual prisoners in their own homes (Jayewardene, 1982; Jones, 1987; Procke, 1981)). In addition, Fattah (1986) argues that crime prevention programs such as neighbourhood watch, which count on seniors to be the ‘eyes and ears’ of the police, may pose some inherent dangers for participants. Moreover, some of these programs have been shown to be ineffective in reducing crime and fear of crime.⁶ Jones (1987) further points out that crime prevention initiatives may escalate the fear of crime, while at the same time making seniors feel increasingly deskilled in coping with their environment and continuing to live independently in the community.

Statistical studies have reinforced the argument that programs may in fact be focusing on the wrong problem — which is not so much that seniors are likely to be victimized, but that they fear victimization. Research has shown, for example, that criminal victimization is not as great a problem for seniors as originally thought (Cook et al., 1981; Solicitor General of Canada, 1985). In fact, seniors have a lower aggregate victimization rate than the younger population and the lowest victimization rates for crimes of rape, robbery, aggravated assault, and simple assault. They do, however, have the highest victimization rates for personal larceny with contact — purse snatching and pocket picking. When personal larceny rates and robbery rates are combined, however, the victimization rate of seniors is similar to that of the younger population (Hochstedler, 1981).

4.3 Dealing with Fear

Seniors' fear of victimization is in part attributable to the characteristics of seniors' victimization — it occurs in and around their homes, acting as a constant reminder of vulnerability and making them feel that they have no safe haven (Brillon, 1987; Jones, 1987). Fear arises from the consequences of victimization — in particular, health and financial setbacks from which it is difficult to bounce back (Brillon, 1987). In most cases, however, fear has been found to be independent of actual victimization and is more likely to be associated with seniors' social, psychological, physiological, economic and demographic characteristics and the sense of insecurity generated by these characteristics. In other words, fear is linked to seniors' perceptions of themselves in the world — if they perceive themselves as weak, poor, lonely and alienated from society, they will fear being victimized (Brillon, 1987).

A study conducted to ascertain Ottawa seniors' perceptions of victimization and to obtain input on program development found that seniors do have a realistic view of the possibility of being victimized and the consequences of victimization (Juliani et al., 1983). They attribute the potential for victimization not to age but to other characteristics that make them more vulnerable to victimization. They are capable of and willing to take precautionary measures to avoid victimization, but they are not willing to take measures that would affect their quality of life. Fear of victimization, where it existed, was expressed as a vague uneasiness but not a factor that affected lifestyle (Jayewardene et al., 1983).

Hearing about actual victimization or rumours of victimization may convert this uneasiness into a second type of fear — heightened awareness that prompts the individual to take precautionary measures but still does not have a major influence on lifestyle. However, the second type of fear may be converted to a more crippling fear if society's reaction to actual victimization gives seniors a sense of helplessness, reinforced by the conviction that social arrangements to protect individuals and property are inadequate or that police and courts are not really concerned about victims (Jayewardene et al., 1983; Arcuri, 1981). When this occurs,

seniors may develop a growing antipathy to the police, refusing to report victimization (Ernst et al., 1976) and increasing their social isolation. The problem of criminal victimization, then, is really one of dealing with fear before it reaches crippling proportions.

4.4 Existing Programs

Dealing with seniors' fears is reflected in recent efforts in the United States. The Milwaukee Police Department, for example, has a seniors' anti-crime unit specializing in investigating and preventing crimes in which seniors are more likely to be victims, including contact crimes and confidence crimes. Officers working in the unit are trained to respond promptly and courteously to calls for assistance, to reassure elderly victims and alleviate their concerns regarding their involvement in the criminal justice system, to make referrals to supportive agencies, and to pay as many follow-up calls as may be necessary to assuage concerns (Hamel, 1979; Zevitz and Marlock, 1989). Officers receive specialized training in interviewing senior citizens to make them aware, for example, of possible sensory perception difficulties such as hearing or vision deficits as well as possible memory dysfunction. By easing emotional distress, the aim is to foster a climate of sympathy and trust and build the co-operation and information exchange needed for effective police performance (Zevitz and Gurnack, 1991). Evaluation indicates that such programs have succeeded in reducing seniors' fear of victimization and improving their satisfaction with police performance (Zevitz and Gurnack, 1991; Zevitz and Rettammel, 1990; Sutton, 1981; Juliani et al., 1983).

With the new emphasis on community policing and reflecting community needs in the provision of services, some Canadian police departments have also introduced programs to serve seniors. The police force in New Glasgow, Nova Scotia, for example, has 21 community programs, two of which are geared to seniors. The Blue Light Program is designed to give seniors and people with disabilities a means to signal for help in an emergency; a blue light placed in a window can be turned on to alert neighbours or passers-by. The Vial of Life program gives seniors a way to communicate with police emergency medical

personnel if they are incapacitated by accident or illness. Participants place their medical history in a small vial attached to a refrigerator shelf; a decal on the refrigerator door indicates that the person is participating in the program (Kinnon and MacLeod, 1990).

In Victoria, the police department introduced a community police station approach in 1987, using store-front offices in shopping malls. This police presence and easy accessibility of the police station is thought to contribute to a greater sense of security for seniors (Kinnon and MacLeod, 1990). For seniors living further away from the stations, an outreach plan exists, but the amount of outreach is limited by staff and funding shortages. Community police stations also operate one-to-one programs intended to provide daily telephone contact with seniors in their homes (Kinnon and MacLeod, 1990).

In Ontario, the Ministry of the Solicitor General is developing a new community-based initiative intended to address the policing and safety concerns of seniors. Now being pilot-tested in the Halton region, the Seniors and Law Enforcement Together (SALT) program involves a committee of senior representatives from the community and representatives of local police services that meets to discuss crime-related issues for seniors in the region and to develop programs to address these issues.

Another approach is illustrated by the police department in Mahone Bay, Nova Scotia, a small town where 60 per cent of the population is made up of seniors. Here the police see their role as assuring people the quiet enjoyment of their lives, an approach that extends far beyond law enforcement and the maintenance of order. The police make daily visits to enquire about the welfare of seniors living in their own homes or apartments and in nursing homes. They provide vans to take seniors in the nursing home to Halifax for the day. They encourage seniors to call for help for any problem at any time of day or night; sometimes lonely callers just want to talk. They also organize social and educational activities, all paid for through fund raising in the community (Kinnon and MacLeod, 1990).

In summary, then, two general approaches have been adopted to deal with criminal victimization of seniors. The one adopted by most police forces has been crime prevention, which seeks to reduce the incidence of crimes, especially crimes to which seniors are particularly vulnerable, by encouraging seniors to change personal habits and practices or by manipulating the environmental sources of crime.

The other, adopted by the police forces cited here, is the agency responsiveness approach, which seeks to "modify the functioning of the police agency so as to make it more sensitive to the concerns of the elderly citizens" (Phelps, 1992). Studies of seniors' attitudes toward the police indicate that although they tend to have a positive attitude initially, this attitude is eroded by contact with the police; in fact, each successive contact causes further erosion, whether or not the contact is related to a crime (Arcuri, 1980). Given this, the agency responsiveness approach, because it demonstrates concern for seniors in concrete ways, may provide better services for individual seniors while also helping to deal with one of the broader consequences of victimization — the withdrawal of co-operation from the police by victims who believe that the criminal justice system has little help to offer them (Phelps, 1992). The Mahone Bay model may not be feasible in every community in Canada, particularly in larger centres, but the creation of specialized units to deal with seniors' crime concerns, staffed by officers trained to interact effectively with seniors is not an unrealistic expectation.

CONCLUSION

Three observations can be drawn from this review of safety and security programs for seniors. The first relates to the manner in which programs have been developed. The most common programs are those intended to prevent incidents that threaten seniors' safety and security. In many cases, however, programs have been developed without input from seniors, with the result that they either fail to reach their intended clientele or have consequences other than those intended by

program designers. Fire prevention programs, for example, have been shown to be more effective if delivered in seniors' own homes, yet most fire prevention programs are based on self-education or group education in seniors' centres. Similarly, there is evidence to suggest that crime prevention programs achieve their goal at the expense of seniors' quality of life and freedom of movement; they can actually undermine seniors' sense of security, with the result that they curtail their activities outside the home. Programs to deal with the particular consequences for seniors of criminal victimization have been developed only rarely, and seldom with input from seniors. As a result, programs tend to deal with these consequences from the perspective of the organization and its objectives, not from the perspective of the older individual.

Failure to consult seniors adequately in program development has resulted in programs that focus on the wrong problem. As our review of the literature showed, while being aware of the possibility of criminal victimization, fire injuries and medical emergencies, seniors were less concerned about the event itself than about the possibility that they would be helpless — or that no help would be available — if an incident occurred. Playing a large part in seniors' perceptions of safety and security, then, is the extent to which they feel helplessness resulting from the physiological changes of aging in combination with social isolation.

Programs that emphasize society's concern about the overall welfare of seniors and reassure them that help will be forthcoming rapidly when required are therefore more likely to serve the goal of enhancing seniors' sense of safety and security and enabling them to live independently and confidently in the community. Some of the programs that take this approach were described in this report. Other programs — such as Ottawa's Wandering Persons Registry (giving the police ready access to information to help them search for Alzheimer's patients), personal emergency response systems (involving both formal and informal help networks), and elder abuse prevention programs in Nepean, Ontario, and Newfoundland (Ennis, 1993; Bohuslawsky, 1994) — serve a similar function, demonstrating community concern for and attention to seniors' quality of life.

A second observation relates to the lack of focus in existing programs, which generates a potential for duplication while at the same time leaving seniors insufficiently informed about the public safety services available to them. Particularly in the case of police, fire protection and ambulance services, there would appear to be significant room for co-ordination, co-operation and information exchange in identifying the needs of seniors in a community and assessing the ability of existing programs to meet them. Communicating with seniors, particularly those living independently, about available public safety services would be an important part of this co-operative effort.

The third observation is that no single program model is universally applicable. Communities vary greatly in terms of the size of their senior population and the needs and concerns of residents; programs that serve one community very well might be inappropriate elsewhere. The Mahone Bay police department organizes many of its activities around the community's older population; this might not be feasible in a larger community with a smaller proportion of senior citizens, but police departments in larger cities have shown that more appropriate and sensitive approaches are possible. The key in all provision of public safety services — whether ambulance, fire or police — is to base program development on complete and current information about the community, to consult widely with seniors about their concerns and needs, and to involve both informal and formal help networks in the development of programs and services.

ENDNOTES

1. In the United States, Gerson and Skvarch (1982) found that 43 per cent of calls from seniors for emergency medical services resulted in transport to the hospital. They also found that 25 per cent of 14,400 nonscheduled ambulance calls during a 12-month period were for patients age 65 or older.
2. The purpose of this review was to provide advice on system governance and structure of the emergency health system, labour/management relations, service issues and staffing, training and career development issues. Under the service issues, the author of the report does not make reference to the aging population or to demands will be placed on the emergency health services.
3. For information in fire safety in institutions for the aging, see Richardson, 1983.
4. The printed material included the following: the need for fire safety; extinguishing fires; the ingredients of a fire; how fires start and spread; the nature of smoke; the types of smoke detectors, where smoke detectors should be located, and how to test the; human behaviour during a fire; the hazards of smoking; the hazards of electrical appliance such as heating pads and electric blankets; the need for cooking and barbecuing safety; fire emergency planning; the wearing of loose-fitting clothes or flowing sleeves around stove tops; the development of fire emergency procedures; and the 'stop, drop and roll' procedure to smother the flames. It also included a fire hazards monthly check list.
5. To gather information on police programs directed to seniors, provincial government officials responsible for policing were contacted (A list of those contacted is available from NACA upon request.). One of the major shortcomings of this review is that many of these officials were unaware of programs delivered at the municipal level.
6. See, for example, Rosenbaum, D. The Theory and Research Behind Neighbourhood Watch: Is it a Sound Fear and Crime Reduction Strategy? *Crime and Delinquency*, 33, 1, (1987): 103-134; Gabor, T. The Phenomenon of Displacement in Police Prevention Programs. M.A. thesis, University of Ottawa, 1977.

REFERENCES

- Aldrich, C.A., Hisserich, J.C.F. and L.B. Lave. An analysis of the demand for emergency ambulance service in an urban area. *American Journal of Public Health*, 61, (1971): 1156-1169.
- Arcuri, A. The police and the elderly. In Lester, D. (ed.), *The elderly victim of crime*. Springfield: C.C. Thomas, 1981.
- Blye, P. and J.P. Yess. Firesafety in elderly housing. *Fire Journal*, 81, 6, (1987): 28-30, 75-76.
- Bohuslawsky, M. Nepean police first in nation to train officers to fight elderly abuse. *The Ottawa Citizen*, (February 4, 1994): B2.
- Brillon, Y. *Victimization and fear of crime among the elderly*. Toronto: Butterworths, 1987.
- British Columbia Ambulance Service. *Parafacts*. Victoria: British Columbia Ambulance Service Public Relations, 1993.
- Cadigan, R.T. and C.F. Bugarin. Predicting demand for emergency ambulance service. *Annals of Emergency Medicine*, 18, (1989): 618-621.
- Callahan, J.J. Elder abuse: Some questions for policy makers. *The Gerontologist*, 28, 4, (1988): 453-458.
- Cook, F.L. et al. *Setting and reformulating policy agenda: The case of criminal victimization of the elderly*. New York: Oxford University Press, 1981.
- Doty, L. and G.J. Caranasos. Training law enforcement officers to assist the demented elderly. *Journal of Applied Gerontology* 9, 3, (1990): 355-363.
- Edmonton Police Department. *Victim services unit: Final report*. Edmonton: 1980.
- Ennis, S. Elder abuse: Education is the key to reduction. *R.C.M.P. Gazette*, 55, 6, (1993): 17-20.
- Ernst, M., Jondy, L. and H. Friedman. *Reporting and non-reporting of crime by older adults*. Denton: North Texas State University Centre for the Study of Aging, 1976.
- Etter, C.N. A directional report on elder mistreatment in Canada. *R.C.M.P. Gazette*, 55, 6, (1993): 10-16.
- Fahy, R.R. and A. Norton. How being poor affects fire risk. *Fire Journal*, 28, 30, (1989): 75-76.

- Fattah, E. The role of senior citizens in crime prevention. *Ageing and Society*, 6, (1986): 471-480.
- Friedmann, R.R. *Community policing*. New York: St. Martin's Press, 1992.
- Garrow, T. U.S. health care group visits BCAS and paramedic academy. *EHS Mirror*, 5, 1, (1993): 4.
- Gerson I.W. and D. Skvarch. Emergency medical service utilization by the elderly. *Annals of Emergency Medicine*, 11, (1982): 610-612.
- Hall, J. Jr. Elderly, the sick, and health care facilities. *Fire Journal*, 84, 4, (1990): 37-42.
- Hamel, R. Assisting the elderly victim. In Goldstein, A. (ed.), *Police and the elderly*. New York: Pergamon, 1979.
- Hamm, B. Learning to care for the elderly. *Journal of Emergency Medical Services*. (October 1993): 57-60.
- Harris, L. *The myth and reality of aging in America*. Washington: National Council on the Aging, 1975.
- Health and Welfare Canada. *Fact book on aging in Canada*. Ottawa: Supply and Services Canada, 1983.
- Lafond, R. *Personal services: Psychosocial planning for disasters*. Ottawa: Health and Welfare Canada, 1992.
- Herrmann, N. Confusion and dementia in the elderly. In National Advisory Council on Aging (ed.), *Mental health and aging*. Ottawa: the Council, 1991.
- Hochstedler, E. *Crime against the elderly in 26 cities*. Albany: Criminal Justice Research Centre, 1981.
- Jayewardene, C.H.S. *The police*. Ottawa: Crimcare Inc., 1993.
- Jayewardene, C.H.S., Juliani, T.S. and C.K. Talbot. *The elderly as victims of crime*. Ottawa: Crimcare Inc., 1982.
- Jayewardene, C.H.S., Lang, S. and C. Gainer. Changing attitudes to the criminal justice system through formal education. *Crime and Justice*, 5, 2, (1977): 126-130.
- Jones, D. Elderly victimization - A survey report. *R.C.M.P. Gazette*, 45, 1, (1981): 1-8.

- Jones, G.M. Elderly people and domestic crime: Reflections on ageism, sexism, and victimology. *British Journal of Criminology*, 27, 2, (1987): 191-201.
- Juliani, T.J., Talbot, C.K. and C.H.S. Jayewardene. *Planning to protect the elderly*. Ottawa: Crimcare Inc., 1983.
- Kean, D.W. *Family violence: Women, children, seniors and persons with disabilities. An annotated bibliography for police*. Ottawa: Solicitor General of Canada, 1993.
- Kinnon, D. and L. MacLeod. *Police and the elderly: Evolving implications in an aging society*. Ottawa: Solicitor General of Canada, 1990.
- Kronld, M. Living with sensory loss: Smell and taste. In National Advisory Council on Aging (ed.), *Living with sensory loss*. Ottawa: the Council, 1990.
- Kvalseth, T.O. and J.M. Deems. Statistical models of the demand for emergency medical services in an urban area. *American Journal of Public Health*, 69, (1979): 250-255.
- Lai, S. Living with sensory loss: Hearing. In National Advisory Council on Aging (ed.), *Living with sensory loss*. Ottawa: the Council, 1990.
- Leighton, B. and A. Normandeau. *A vision in the future of policing in Canada*. Ottawa: Solicitor General of Canada, 1990.
- McCoy, G.E., Johnstone, R.A. and R.B. Duthie. Injury to the elderly in road traffic accidents. *Journal of Trauma*, 29 (1989): 494-497.
- MacKinnon, M. and M. Evans. Day in the life of a paramedic and intimidating experience. *EHS Mirror*, 5, 3, (1993): 1.
- MacKinnon, J. Elder abuse. *R.C.M.P. Gazette*, 55, 6, (1993): 1-9.
- Malinchak, A.A. *Crime and gerontology*. Englewood Cliffs: Prentice Hall, 1980.
- Mann, K. Postmenopausal osteoporosis and fractures. In Goldbloom, R. and R. Lawrence (eds.), *Preventing disease: Beyond the rhetoric*. New York: Verlag, 1980.
- Meador, S. Age-related utilization of advanced life support services. *Prehospital and disaster medicine*, 16, 1, (1991): 9-14.
- Miller, A. *Patterns of fire casualties in home fires by age and sex, 1986-90*. Quincy, MA: National Fire Protection Association, 1993.
- Muir, J. *Calgary's victims/crisis unit: A summary of evaluation findings and discussion of issues*. Ottawa: Solicitor General of Canada, 1984.

- Muir, J. *Resource materials for planning and managing police-based victim assistance programs*. Ottawa: Solicitor General of Canada, 1985.
- Myles, J. and M. Boyd. Population aging and the elderly. In Forcese, D. and S. Richer (eds.), *Social issues: Sociological views of Canada*. Scarborough: Prentice-Hall, 1982.
- National Advisory Council on Aging. *Understanding seniors' independence. Report No. 1: The barriers and suggestions for action*. Ottawa: 1989.
- Naeyaert, K. Living with sensory loss: Vision. In National Advisory Council on Aging (ed.), *Living with sensory loss*. Ottawa: the Council, 1990.
- Neugarten, B.I. Age groups in American society and the rise of the young old. *Annals of the American Academy of Political and Social Sciences*, 415, (1974): 187-198.
- Norquay, G. and R. Weiler. *Services to victims and witnesses of crime in Canada Ottawa*. Ottawa: Solicitor General of Canada, 1981.
- Ogg, J. and C. Munn-Giddings. Researching elder abuse. *Ageing and Society*, 13, (1993): 389-413.
- Ontario Office of the Fire Marshal. *A report on 1989 residential fire fatalities in Ontario* (Unpublished report). Toronto: December 1990.
- Ordy, J.M. and K.R. Brizzee. *Sensory systems and communication in the elderly*. New York: Raven Press, 1979.
- Podnieks, E. Survey on abuse of the elderly in Canada: Preliminary findings. In Kinnon, D. and L. MacLeod (eds.), *Police and the elderly: Evolving implications in an aging society*. Ottawa: Solicitor General of Canada, 1990.
- Petraglia, J. Fire and the aging of America. *National Fire Protection Association Journal*, 85, 2, (1991): 36-46.
- Phelps, P. *The development of an elderly victimization management strategy for law enforcement*. Sacramento, CA: Commission on Peace Officer Standards and Training, 1992.
- Rademaker A.W., Powell, D.G. and J.H. Read. Inappropriate use and unmet need in paramedic and non-paramedic ambulance systems. *Annals of Emergency Medicine*, 16, (1987): 553-556.
- Ray, R. Paramedic service demanded by Ottawa citizens. *Today's Seniors*, (January 1994): 29-30.

- Richardson, J.K. *Manual for fire safety in homes for the elderly*. Ottawa: National Research Council Canada, 1983.
- Sadler, A.M., Sadler, B.I. and S.B. Webb. *Emergency medical care: The neglected public service*. Cambridge: Ballinger Publishing Co., 1977.
- Saulnier, D. Living with sensory loss: Touch. In National Advisory Council on Aging (ed.), *Living with sensory loss*. Ottawa: the Council, 1990.
- Schack S. and R.S. Frank. Police service delivery to the elderly. *American Academy of Political and Social Science*, 438, (July 1978): 81-95.
- Schuman, L.J., Wolfe, H. and J. Sapulveda. Estimating demand for emergency transportation. *Medical Care*, 15, (1977): 738-749.
- Shell, D. *Protection of the elderly: A study of elder abuse*. Winnipeg: Manitoba Council on Aging, 1982.
- Spaite, D. et al. Geriatric injury: An analysis of prehospital demographics, mechanisms and patterns. *Annals of Emergency Medicine*, 19, 12, (1990): 1418-1421.
- Statistics Canada. *Social security: National programs*. Ottawa: 1978.
- Statistics Canada. *The elderly in Canada*. Ottawa: 1984.
- Stevens, J., Cain, W. and D. Weinstein. Aging impairs the ability to detect gas odour. *Fire Technology*, 23, 3, (1987): 198-204.
- Solicitor General of Canada. *Criminal victimization of elderly Canadians*. Ottawa: 1985.
- Sutton, A. *Crime and the elderly person: Problems of fear and alienation*. Pyrmont: New South Wales Printing Office, 1981.
- Swimmer, G. *The final report of the emergency medical services review*. Toronto: Emergency Health Services, Ministry of Health, 1981.
- Talbot, C.K. and C.H.S. Jayewardene. Victim prevention: An alternative strategy for the police. *Canadian Police College Journal*, 4, 4, (1980): 277-285.
- Uren, G. Calgary police service senior liaison program. *R.C.M.P. Gazette*, 51, 12, (1989): 7-9.
- Walker, B. et al. The short-term effects of a fire safety education program for the elderly. *Fire Technology*, 28, 2, (1992): 134-162.

- Williams, P.M. and C. Shavlik. Geographic patterns and demographic correlates of paramedic runs in San Bernardino. *Social Science and Medicine*, 13(D), (1979): 273-279.
- Zevitz, R.G. and A.M. Gurnack. Factors related to elderly crime victims' satisfaction with police service: The impact of Milwaukee's 'Gray Squad.' *The Gerontologist*, 31, 1, (1991): 92-101.
- Zevitz, R.G. and D. Marlock. Senior citizen assault prevention unit. *F.B.I. Law Enforcement Bulletin*, 58, 3, (1989): 10-14.
- Zevitz, R.G. and R.J. Rettammel. Elderly attitudes about police service. *American Journal of Police*, 9, 2, (1990): 25-39.

APPENDIX A

Survey Questionnaire

The questions that were sent to government officials are as follows:

Programs

1. Do you have programs that are specifically targeted towards the elderly? Do you have programs that are targeted at adults which also include seniors? Do you know of other programs on the elderly? If so, can you identify them?
2. How were your programs developed? Were elderly groups involved in the development of these programs? Are these programs designed to address specific client groups among the elderly (e.g., widows, seniors over the age of 75)?
3. How often are these programs used?
4. To what extent has your department established a 'partnership' (i.e., working close with elderly groups, sitting on elderly safety committees) with seniors groups?

Policies and Procedures

5. Do you have policies that specifically address how to respond to the elderly? Do you have any procedures in place designed to respond to the needs of the elderly?
6. In what context were these policies and procedures developed or established (e.g., response to an incident, government mandate)?
7. When were these policies and procedures implemented?
8. What other initiatives has your department taken to respond to the needs of the elderly (e.g., train the staff, strategic planning, ongoing dialogue)? If possible, provide details on these initiatives as well as their importance within your department (e.g., high priority).

General Information

9. To what extent do you expect your department to be affected by the growth of the aging population and their changing characteristics?
10. What is the nature or type of calls for service that your department receive from the elderly? Do you have any statistics or data on the calls for service from the elderly? If yes, is the information available?

11. Are you aware of any studies or documents on how the public safety sector (e.g., police, fire and ambulance) is responding to the elderly? If yes, can you provide the references and a copy of the report?



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